

IN THE UNITE OF PATENT AND TRADEMARK OFFICE

In re Application of: Greer et al.	Docket No.: 0908-CE RPBPC REF: CRUS-0164
Serial Number: 09/499,442	Art Unit: 2174
Filing Date: February 7, 2000	Examiner: Nhon D. Nguyen
Title: USER INTERFACE SYSTEMS, N PRODUCTS FOR MULTI-FUNCTION	METHODS, AND COMPUTER PROGRAM I CONSUMER ENTERTAINMENT

REPLY BRIEF ON APPEAL

RECEIVED

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

APPLIANCES

MAY 2 8 2004 Technology Center 2100

Sir:

In response to the Office Action of February 27, 2004, and Further to the NOTICE OF APPEAL dated October 14, 2003 in the above-captioned application, applicant hereby requests REINSTATEMENT of the APPEAL and submits this REPLY BRIEF ON APPEAL in response to the Examiner's rejection.

Since the NOTICE OF APPEAL fee and APPEAL BRIEF fees have already been paid, no additional fees are due at this time. See, MPEP §1208.03 and 37 C.F.R. §1.193(b)(2).

(1) Real party in interest

The real party in interest in this appeal is Cirrus Logic, Inc., the assignee of record in the present application.

(2) Related appeals and interferences

There are no related appeals or interferences at the present time. As noted above, the application was appealed on October 14, 2003. The Examiner reopened prosecution on the merits in a FINAL Office Action dated February 27, 2004 to apply a new Prior Art rejection to the claims. Applicant hereby requests that the APPEAL be REINSTATED.

(3) Status of claims

A statement of the status of all the claims, pending or canceled, and identifying the claims appealed.

Claims 1-16 and 18-20 are pending in the above-captioned application.

Claims 17 was cancelled in an amendment of June 2nd, 2003.

Claims 1-16 and 18-20 were appealed from the FINAL rejection of August 13, 2003. The Examiner has since withdrawn that rejection.

Claims 1-16 and 18-20 are hereby appealed from the FINAL rejection of February 27, 2004.

(4) Status of amendments

All amendments to date have been entered, to the best of applicant's knowledge.

(5) Summary of invention

A user interface provides the functionality and concurrency capability of a computer, without the complexities of a computer operating system, applications and hardware. The present invention permits use of a computer while maximizing a particular selected functionality. In particular, computer application grouping and launching facility on a user interface is maintained

and supplemented with detection of resource conflicts with an earlier launched application, followed by user prompt requesting choice of implementation of the new or preceding application.

Since only a limited number of applications are run on the device, it is possible to map in advance which devices or applications will conflict with one another and prevent a user from running conflicting applications, and thus avoid cryptic error messages.

Thus, for example, if a speakerphone/telephony application is launched and the web is already running, a prompt to select one or the other of the applications is produced only in the case where there is a resource conflict. If a DVD application is launched and there is input from a TV tuner, the prompt to select one or the other of the applications is produced only in the case where there is a resource conflict. Further, the user interface may be configured to provide enhanced hardware utilization according to a launched application.

For example, when DVD is launched, a check is made to determine whether a TV has been connected. If a TV is connected, then the user interface will automatically select special hardware in a video-out chip to engage alternate video ports to produce a better quality output. If no TV is connected when DVD has been launched, the user interface automatically switches back to standard VGA mode to enable re-display of the user interface.

(6) Issues

Applicant contends that the remaining issues on appeal are as follows:

- 1. Whether claims 1, 4, 5, and 20 are unpatentable under 35 U.S.C. §102(e) over Smith.
- 2. Whether claims 2 and 3 are unpatentable under 35 U.S.C. §103(a) over Smith in view of Lee, Sang-Hae.
 - 3. Whether claim 6 is unpatentable under 35 U.S.C. §103(a) over Smith in view of Sinclair.
- 4. Whether claims 7-10, 15, 16, and 20 are unpatentable under 35 U.S.C. §103(a) over Smith in view of Lee, Kab-Keun.

- 5. Whether claims 11 and 12 are unpatentable under 35 U.S.C. §103(a) over Smith in view of Lee, Kab-Keun.
- 6. Whether claims 13, 18, and 19 are unpatentable under 35 U.S.C. §103(a) over Smith in view of Lee, Kab-Keun, further in view of Lee, Sang-Hae.
 - 7. Whether claim 14 is unpatentable under 35 U.S.C. §103(a) over Smith in view of Moon.

(7) Grouping of claims

All of the claims are rejected in whole or part, upon the Smith reference. Independent claims 1, 4, and 20 have been rejected as being anticipated the Smith reference. Thus, if the Smith reference fails to teach all the elements of the independent claims, arguably all of claims 1-6 and 20 (independent and dependent) are allowable and thus stand together. The various independent claims, however, contain different claim limitations, and thus, under the doctrine of claim differentiation, are of varying scope, and thus each should be treated independently on its merits.

However, as independent claims 7 and 16 and the various dependent claims are rejected in view of the Smith reference and a combination of other references, all of the claims do not fall together. In particular, each dependent claim describes a different claim limitation in a different combination with its associated independent claim and any intervening claim. Under the doctrine of claim differentiation, each claim is thus of varying scope and should be treated independently of the others.

In particular, independent claims 1, 4, 7, 16, and 20 contain the limitation of a conflict map, albeit claimed in different environments. The application of different art rejections to these independent claims is verification by the Examiner that the claims do not stand or fall together. In addition, some dependent claims include other features such as the limitation of context-sensitive signal conversion from the IR remote to a USB device, a feature which further distinguishes the present invention from the Prior Art.

Thus, applicant submits that none of the claims stand or fall together.

(8) Argument

(i) 35 U.S.C. 112, first paragraph

There are no pending rejections under 35 USC 112, first paragraph in the above-captioned application.

(ii) 35 U.S.C. 112, second paragraph

There are no pending rejections under 35 USC 112, first paragraph in the above-captioned application.

(iii) 35 U.S.C. §102

Claims 1, 4, 5, and 20 are rejected under 35 U.S.C. §102(e) as being anticipated by the Smith reference.

In response to applicant's BRIEF ON APPEAL, all the references cited by the Examiner have been withdrawn in favor of a new slate of references. However, this new slate of references still does not clearly teach or suggest all of the claimed elements of the present invention.

The newly cited SMITH reference is no better than the previous art applied. SMITH teaches a method of selecting between pointing devices (e.g., mouse) in a computer system (e.g., laptop). While SMITH is directed toward computer systems, SMITH doe not teach in the environment of a set-top multimedia box. The relevant part of SMITH relied upon by the Examiner is Col. 4, lines 13-18:

In step 116, a determination is made as to whether a function from menu 60 has been selected. If it has, that function is assigned to the appropriate pointing device in step 118. In step 120 a conflict check is performed, for example, to determine if two devices have been assigned conflicting functions.

In step 122, conflicts are resolved by not permitting the assignment of a subsequent

conflicting device, prompting a user to adjust setting values (COM ports, etc.) and in other known manners. (Smith, Col. 4, lines 10-18, emphasis added)

This portion of SMITH recites only a conventional *post hoc* conflict check in which conflicts are checked for during operation of the device, and assignment of conflicting hardware to a second application is prevented. SMITH does not teach avoiding such conflict checks by mapping them out in advance and preventing launching of such conflicting programs in the first place. There is no discussion or teaching in SMITH of mapping conflicts in advance.

The present invention, in contrast, is a simplified multi-media computer system, which may be connected to a television as an output device. Since it has a predetermined number of functions, it is possible to map out all possible hardware (and software) conflicts in advance, so that a dreaded WindowsTM "error" message will not be generated. This technique makes such a consumer product more user-friendly and suitable for the entertainment market where users may have limited computer skills.

This limitation is clearly recited in the claims. Claim 1, for example, recites "a conflict map containing a list of conflicts between the list of predetermined computer applications". Smith teaches no such conflict map, and thus the $\S102(e)$ reference fails.

As noted above, the claims of the present invention are of varying scope. Claim 1, as noted above, recites a conflict map containing a list of conflicts between computer applications. However, other independent claims such as Claim 7, for example, recites a conflict map containing a list of device conflicts between at least two device application modes. The SMITH reference teaches neither type of device map.

As noted, the SMITH reference teaches only detecting conflicts once the computer is running and when conflicts can possibly occur and does not map out such potential conflicts in advance.

Thus, it is readily apparent that the SMITH reference does not anticipate all of the features of the claimed invention as the SMITH reference does not teach:

1. Preparing a conflict map ahead of time to map out all possible conflicts between applications;

- 2. Detecting conflicts between different applications before they are launched by using the conflict map;
- 3. Preparing a conflict map for device conflicts in different application modes; and
- 4. Detecting device conflicts in different application modes before they are launched by using the conflict map.

The §102 rejection is without merit and should be withdrawn.

(iv) 35 U.S.C. 103.

There are a number of ancillary 103 rejections applied to the various dependent claims using the SMITH reference alone or in view of other references. As the SMITH reference does not teach or suggest the limitations of the base independent claims, these §103 rejections automatically fail as well. However, some of these §103 rejections bear comment.

Rejection of claims 2 and 3 under 35 U.S.C. 103(a) over the SMITH reference in view of Lee, Sang-Hae.

Claims 2 and 3 were rejected under 35 U.S.C. 103(a) over the SMITH reference in view of Lee, Sang-Hae.

Claim 2 broadly recites a remote control. Claim 3, recites, part:

"converting means for converting infrared remote control signals to USB signals, said converting means receiving an infrared remote control signal, determining context of use of the infrared remote control signal, and generating a corresponding USB signal to communicate the infrared remote control signal to an intended device. (emphasis added)

The rejection relies upon a portion of the SUMMARY OF THE INVENTION of Lee, Sang Hae, specifically, Col. 2, lines 25-49. This portion of Lee, Sang Hae teaches nothing more than the use of an infrared receiver coupled to a USB controller (See, Figure 3 of Lee, Sang Hae). There is

no discussion, teaching, or even inference of context-sensitive conversion of IR signals to USB signals.

As illustrated here, claim 3 contains the limitation of determining the <u>context of use</u> of the IR signal and then generating a corresponding USB signal based upon this context. Thus, if a button is pressed on the remote in one mode of operation, it may generate one type of USB signal (e.g., advance DVD play) while in another mode it may generate another type of USB signal (e.g., change radio station).

The Lee, Sang Hae reference does not address this feature of the claim and thus, in addition to the deficiencies in the underlying SMITH reference, the Examiner has not made a *prima facie* case of obviousness in his rejection of claim 3, and applicant need not even address the motivation to combine two such references.

Regardless, the motivation stated by the Examiner bears comment. The Office Action states that the motivation to apply the Lee, Sang Hae reference to SMITH is to allow a user to apply a wireless input device such a mouse or keyboard to SMITH. There are two problems with this argument. First, even if we assume there is merit to this motivation, the resulting apparatus would not form the present invention – by the Examiner's admission. A mouse or keyboard may not provide the "context" sensitive input scenario that a multimedia device may incur. Thus, the Examiner's motivation is weak – nothing more than a motivation to add a generic IR device to a generic computer. There is nothing in the teaching of either SMITH of Lee, Sang Hae to suggest the concept of context-sensitive conversion of IR signals, as neither anticipates a multimedia device where a single remote control may be used to access a number of different functions.

Rejection of claim 6 under 35 U.S.C. 103(a) over the SMITH reference in view of the Sinclair reference.

Claim 6 was rejected under 35 U.S.C. 103(a) over the SMITH reference in view of the Sinclair reference. The Examiner admits that the SMITH reference does not teach selectively using either a TV set or a computer monitor as an output device. As SMITH is directed toward selecting from multiple pointing devices in a computer (e.g., laptop) this is not surprising. Again, the present

invention is directed toward a multi-media device, where as SMITH is apparently directed toward laptop computers.

Regardless, the Examiner combined the SMITH reference with the Sinclair reference. The Sinclair reference discloses a graphics controller, which may selectively display graphics or video data on a LCD or VGA CRT screen, or on a television set. The graphics controller can convert this data without using redundant conversion techniques.

Claim 6 of the present application recites:

The method according to claim 5, further comprising the steps of:

determining whether a television or a computer monitor has been connected to the computer system, and

selecting hardware in a video output device in the computer system to engage alternate video ports to produce an optimal quality output in response to said determining step. (emphasis added).

The Examiner cites a rather large portion of the Sinclair reference and claims that it teaches this feature. However, applicant cannot find a specific teaching within this large cited portion (Col. 2, line 7 through Col. 4, line 34) that explicitly teaches such a technique. Rather, it appears that Sinclair only converts the data from one format to another and selectively displays such data on either a computer monitor or television set.

The citation of the Sinclair reference is part of a disturbing pattern in the multiple prior art rejections presented in the Office Action. It would appear that the Examiner is using a "parts bin" technique to shop for references that are believed to teach each additional feature of the dependent claims. As noted here, the "parts" (the Sinclair reference) do not "fit" when mated to the primary reference (which does not indeed teach the basic invention) and thus the combination does not teach the limitations of claim 6.

Moreover, the motivation to jam two such "parts" together is merely a citation of the present claim language. We are told by the Examiner that the motivation to would apply Sinclair to SMITH is to produce the claimed invention. While an Examiner may be motivated to make such a hindsight reconstruction, one of ordinary skill in the art, at the time the invention was made, would not, absent applicant's teaching.

Rejection of claims 7-10, 15, 16, and 20 under 35 U.S.C. 103(a) over the SMITH reference in view of the Lee, Kab-Keun reference.

Claims 7-10, 15, 16, and 20 were rejected under 35 U.S.C. 103(a) over the SMITH reference in view of the Lee, Kab-Keun reference. In the Prior Office Action, all the independent claims were rejected together in view of the primary reference. However, the newly cited SMITH reference is directed towards laptop computers, and claim 7 is specifically directed toward television presentation. Thus, the Examiner now combines SMITH with Lee, Kab-Keun to reject claim 7.

Claim 7 recites:

7. A method for selecting one of at least two predetermined device application modes in a microprocessor controlled television set-top system, comprising the steps of:

selecting a first device application mode from a predetermined menu of device application modes, which menu includes at least two such predetermined device application modes,

determining whether a second of said at least two such predetermined device application modes is active,

determining from a conflict map containing a list of device conflicts between the at least two predetermined device application modes whether a potential conflict could occur, and

initiating television presentation of activities relating to said first device application mode if it is determined a potential device conflict may not occur.

Claim 20 includes similar limitations and was rejected on the same grounds by the Examiner.

However, once again, it should be noted that SMITH does NOT teach or suggest any sort of "conflict map" and the Examiner again relies upon the same portion of SMITH teaching only detecting conflicts in real time. Thus, the rejection of claims 7-10 and 15 fails.

The Lee, Kab-Keun reference fails to correct the deficiencies of SMITH. The portion of Lee, Kab-Keun relied upon by the Examiner to "teach" the feature of initiating television

presentation is the preamble to claim 1 of the Lee, Kab-Keun reference, which recites only a "multisystem television which is usable as a monitor of a personal computer".

This "teaching" of Lee, Kab-Keun hardly corrects the underlying defects in SMITH and moreover does not even teach the feature of claim 7 as alleged by the Examiner. A television that can be used as a computer monitor is hardly a teaching of a multimedia device which may present multimedia data on a television. Lee, Kab-Keun teaches the reverse and opposite of the present invention; he teaches a television, not a set-top box, and teaches a television that doubles as a computer monitor, not displaying multimedia data on a television.

Thus we need not even address the rejection of the dependent claims 8-10 and 15. Regardless, applicant provides the following remarks.

Claim 8 recites:

8. The method according to claim 7, further comprising the step of: halting the second of said at least two such predetermined device application modes upon initiation of the first device application mode.

Claim 9 recites:

9. The method according to claim 7, further comprising the step of: minimizing the second of said at least two such predetermined device application modes upon initiation of the first device application mode.

The Examiner admits that the SMITH reference does not teach or suggest halting and/or minimizing the second of at least two predetermined application modes upon initiation of the first device application mode, but rather argues that such a feature is "inherent". Absent some teaching of this "inherent" feature, applicant submits that this argument be withdrawn.

As noted above, the SMITH reference does not teach or suggest two application modes, nor pre-mapping conflicts between two application modes. The SMITH reference teaches only detecting conflicts at the time they may occur. As disclosed in the present application, such conflict detection in real time may not be acceptable for a consumer grade appliance. Conflicts should be prevented before they occur, not detected when conflicting applications are attempted.

Moreover, as SMITH is directed toward applying different mouse inputs to a laptop, it is unclear how SMITH could teach "halting" an application or "minimizing" an application when he is directed toward mouse inputs.

Claim 10 recites:

10. The method according to claim 7, further comprising the step of: presenting images relating to the second of said at least two such predetermined device application modes in a selected window.

The Examiner argues that Figure 3 and 4 of SMITH teach this feature. However, examination of these Figures reveals that they only show the use of pull-down menus to select various input devices. There is no teaching of an "application mode" for a specific device (mouse, pointer, etc.). Even assuming such an "application mode" could exist, there is no teaching in SMITH of presenting images related to such a device in a selected window.

Claim 15 recites:

15. The method according to claim 7, wherein said step of selecting is made by clicking a mouse over an active portion of a screen image of a control panel image.

The Examiner argues that the pull-down menus of SMITH, (Col. 3, lines 54-65) which select a pointing device read on the limitations of claim 15. However, in SMITH, it is a mouse or other pointing device being selected, not an application mode.

Claim 16 recites:

16. A set-top system comprising:

a television for producing images according to one or more application modes; a microprocessor device in communication with said television, said microprocessor device including circuitry for implementing at least two predetermined application modes; and

a controller for selecting an application mode,

wherein said device is configured to determine activation status of at least a single non-selected application mode when a particular other activation mode is selected,

wherein said controller further comprises a selecting means for selecting from a list of predetermined applications and outputting a selection signal, and said controller further comprises:

a conflict map containing a list of conflicts between the list of predetermined applications; and

conflict checking means, coupled to the selecting means and the conflict map, for receiving the selection signal, determining from the selection signal and the conflict map whether a potential conflict could occur, and outputting a display message if a determination is made that a potential conflict could occur.

Again, Claim 16 is now rejected in a §103 rejection as the newly cited SMITH reference is directed toward a laptop, and the Examiner needs to combine SMITH with some sort of television reference in order to make the rejection. However the attempt here fails. As noted above, the Lee, Kab-Keun teaches only a television that may be used as a monitor, not a set top box displaying images on a television. And again, neither SMITH nor Lee, Kab-Keun teach or suggest the idea of a conflict MAP for mapping out conflicts in advance.

It is worth noting here that the creation of such a conflict MAP is also not "obvious" in view of SMITH and/or Lee, Kab-Keun. The present invention as originally conceived, was directed toward a set-top multimedia device with a predetermined number of modes of operation. Unlike the general purpose PC (Laptop) of SMITH, which can perform almost an infinite number of functions and interface with an untold number of devices, the original concept for the present invention provided only a predetermined number of functionality modes of operation and a predetermined number of "devices" to interface with. Thus, it is POSSIBLE to create a conflict map for the finite number of devices in the present invention.

In SMITH, in contrast, it would be nearly impossible to map out all potential conflicts, as the laptop manufacturer would have to know in advance all possible devices and applications that may be run on or connected to the computer. As the PC (or laptop) is designed as a "general purpose" computer, it is impossible to make such predictions. Indeed, software or hardware may be created after the manufacture of the laptop or PC that produces conflicts that the PC or laptop designer may never have considered, much less mapped out in advance.

Thus, the very nature of the PC system such as in SMITH negates any argument that mapping out conflicts in advance would be "obvious" to one of ordinary skill in the art. The present inventors came up with the unique concept of limiting the functionality of their set-top box

so as to limit the number of modes of operation. By doing so, they have produced a robust and consumer-friendly design which can be used in a consumer (as opposed to PC) environment, without generating error messages or requiring a "reboot" when applications or device accesses conflict.

The distinction is more than trivial, as the consumer market does not tolerate the fragility of PC software. For example, it would be totally unacceptable to sell a DVD player which crashed with the frequency of WINDOWS® software, produced odd or cryptic error messages, or required periodic rebooting. Consumer products, particularly entertainment products, need to be robust and not crash-prone. The conflict mapping concept of the present invention allows a microprocessor-based product using a number of devices and application modes, to operate in the consumer environment in a robust manner. Such an invention is not "obvious" to anyone.

Rejection of claims 11, and 12 under 35 U.S.C. 103(a) over the SMITH reference in view of the Lee, Kab-Keun.

It is not clear why these dependent claims were rejected in a separate rejection from their parent claims, as the references applied are identical. The Examiner admits that "modified SMITH" does not disclose subordinating a window in a web browser environment. It is presumed that "modified SMITH" is the Examiner's previous combination of SMITH and Lee, Kab-Keun.

Claim 11 recites:

11. The method according to claim 10, wherein said selected window is subordinated in a web browser environment.

The Examiner further argues that subordinating a window is an obvious feature of a WINDOWS® operating environment. If claim 11 were an independent claim, perhaps this argument would have some merit. However, applicant is not attempting to claim the WINDOWS® operating system. Rather, claim 11 recites a consequence in response to a potential conflict as detected by the conflict map. The "selected window" is subordinated if the conflict map detects a potential conflict. Thus, the limitation of claim 11 needs to be taken in the context of its independent claim and intervening claims. When taken as such, it is clear that this feature is additionally distinguishable over SMITH and Lee, Kab-Keun.

Claim 12 recites:

12. The method according to claim 11, further comprising the step of: presenting a control panel for setting operating parameters for the second of said at least two such predetermined device application modes within a selected window.

Again here, the Examiner relies upon the mouse selector pull-down menus of SMITH. However, these pull-down menus are not displayed in response to a conflict as determined from a conflict map – or indeed even from a conflict determined in real time. Rather, these pull down menus are selected by the user to select a mouse device. Thus, no control panel is displayed in RESPONSE to a determination made from the conflict map.

Rejections of claims 13, 18 and 19 under 35 U.S.C. 103(a) over the SMITH reference in view of Lee, Kab-Keun and Lee, Sang-Hae.

Claim 13 recites:

13. The method according to claim 7, wherein step of selecting comprises the step of selecting with a remote control device.

Claim 13 depends upon claim 7. As noted above, the combination of SMITH and Lee Kab-Keun, fails to teach or suggest all of the limitations of claim 7, in particular a conflict map. The other Lee reference, Lee, Sang-Hae, does not correct this deficiency, as noted above. While the use of remote controls *per se* is known in the art, the use of a remote control in combination with the method of the present invention, including the conflict map, is not known or suggested.

Claim 18 recites:

18. The set-top system of claim 16, wherein said selecting means comprises a remote control, said set-top system further comprising:

an input device interface, for receiving signals from the remote control and converting the signals from the remote control into command signals.

Claim 18 depends upon claim 16, and the same comments as applied to claim 13 above are applied here.

Claim 19 recites:

19. The set-top system of claim 18, wherein said remote control comprises an infrared remote control and said input device interface further comprises:

converting means for converting infrared remote control signals to USB signals, said converting means receiving an infrared remote control signal, determining context of use of the infrared remote control signal, and generating a corresponding USB signal to communicate the infrared remote control signal to an intended device.

Claim 19 includes the additional limitation of context-sensitive generation of a USB signal. See applicant's comments with regard to the rejection of claims 2 and 3 above over SMITH in view of Lee, Sang-Hae. The addition of the other Lee reference fails to correct the deficiencies of the Lee Sang-Hae reference. None of the three references discloses generating USB signals based upon the context of use.

This aspect of the invention is more than trivial. Many multimedia devices suffer from remote button overload. For example, a combination DVD/VCR player may have redundant buttons for playing DVDs and VCR tapes. As such, the remote is studded with tiny buttons and is difficult to use. The present invention solves this problem by using the same buttons for similar functions. How the commands are treated is determined by the context of use. Thus a right-arrow button in DVD mode may advance play of the DVD, whereas in internet radio mode it may change stations. The same IR signal may be received, but how it is converted to a USB signal may be determined by context of use. The overall number of buttons on the remote control can thus be reduced and the device made more user friendly.

Rejections of claim 14 under 35 U.S.C. 103(a) over the SMITH reference in view of Moon.

Claim 14 recites:

14. The method according to claim 7, wherein step of selecting comprises the step of selecting through an on-screen emulation of a remote control device.

Claim 14 recites the emulation of a remote control on a screen (claim 14), which may be activated by clicking on the "remote control" buttons with a mouse (claim 15). The Moon reference is applied in combination with SMITH to allegedly teach this feature.

Moon discloses an image-based keyboard for a small computing device in which a "pointing device" is used to actuate keys shown on a display. Moon does nothing to correct the underlying deficiencies of the SMITH reference, and moreover is directed towards a keyboard and not a remote control device.

(v) Other Rejections

There are no other rejections pending in the above-captioned application.

CONCLUSION

The SMITH reference, which is the primary reference applied to all of the claims, fails to teach the basic features of mapping application and/or device conflicts in advance and detecting application and/or device conflicts before launching an application. The ancillary references fail to correct this defect and moreover fail to disclose the ancillary features to which they are applied.

Applicant respectfully submits that all of claims 1-16 and 18-20 are presently in condition for allowance. Applicant respectfully requests that the Board overturn the Examiner's outstanding rejections and instruct the Examiner to allow the claims on Appeal.

The Commissioner is hereby authorized to charge any additional fees associated with this communication, including patent application filing fees and processing fees under 37 C.F.R. 1.16 and 1.17, or credit any overpayment to **Deposit Account No. 50-1393**.

Respectfully submitted,

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(9) Appendix

The following claims 1-16 and 18-20 are involved in this appeal:

1. A user interface for use with a computer system, said user interface comprising:

selecting means for selecting from a list of predetermined computer applications and outputting a selection signal;

a conflict map containing a list of conflicts between the list of predetermined computer applications; and

conflict checking means, coupled to the selecting means and the conflict map, for receiving the selection signal, determining from the selection signal and the conflict map whether a potential conflict between computer applications could occur, and outputting a display message if a determination is made that a potential conflict could occur between computer applications.

2. The user interface of claim 1, wherein said selecting means comprises a remote control, said user interface further comprises:

an input device interface, for receiving signals from the remote control and converting the signals from the remote control into command signals.

3. The user interface of claim 2, wherein said remote control comprises an infrared remote control and said input device interface further comprises:

converting means for converting infrared remote control signals to USB signals, said converting means receiving an infrared remote control signal, determining context of use of the

infrared remote control signal, and generating a corresponding USB signal to communicate the infrared remote control signal to an intended device.

4. A method of selecting among a predetermined plurality of computer applications to run on a computer system for presentation on a display screen, comprising the steps of:

selecting from a list of predetermined computer applications and outputting a selection signal,

receiving the selection signal and determining from the selection signal and a conflict map containing a list of conflicts between the list of predetermined computer applications whether a potential conflict could occur, and

outputting a display message if a determination is made that a potential conflict could occur between computer applications.

5. The method of claim 4, wherein said step of outputting a display message further comprises the step of:

prompting a user to select another application if a determination is made that a potential conflict could occur.

6. The method according to claim 5, further comprising the steps of:

determining whether a television or a computer monitor has been connected to the computer system, and

selecting hardware in a video output device in the computer system to engage alternate video ports to produce an optimal quality output in response to said determining step.

7. A method for selecting one of at least two predetermined device application modes in a microprocessor controlled television set-top system, comprising the steps of:

selecting a first device application mode from a predetermined menu of device application modes, which menu includes at least two such predetermined device application modes,

determining whether a second of said at least two such predetermined device application modes is active,

determining from a conflict map containing a list of device conflicts between the at least two predetermined device application modes whether a potential conflict could occur, and

initiating television presentation of activities relating to said first device application mode if it is determined a potential device conflict may not occur.

8. The method according to claim 7, further comprising the step of:

halting the second of said at least two such predetermined device application modes upon initiation of the first device application mode.

9. The method according to claim 7, further comprising the step of:

minimizing the second of said at least two such predetermined device application modes upon initiation of the first device application mode.

10. The method according to claim 7, further comprising the step of:

presenting images relating to the second of said at least two such predetermined device application modes in a selected window.

- 11. The method according to claim 10, wherein said selected window is subordinated in a web browser environment.
- 12. The method according to claim 11, further comprising the step of:

 presenting a control panel for setting operating parameters for the second of said at least two such predetermined device application modes within a selected window.
- 13. The method according to claim 7, wherein step of selecting comprises the step of selecting with a remote control device.
- 14. The method according to claim 7, wherein step of selecting comprises the step of selecting through an on-screen emulation of a remote control device.
- 15. The method according to claim 7, wherein said step of selecting is made by clicking a mouse over an active portion of a screen image of a control panel image.
 - 16. A set-top system comprising:

a television for producing images according to one or more application modes;

a microprocessor device in communication with said television, said microprocessor device including circuitry for implementing at least two predetermined application modes; and

a controller for selecting an application mode,

wherein said device is configured to determine activation status of at least a single non-selected application mode when a particular other activation mode is selected,

wherein said controller further comprises a selecting means for selecting from a list of predetermined applications and outputting a selection signal, and

said controller further comprises:

a conflict map containing a list of conflicts between the list of predetermined applications; and

conflict checking means, coupled to the selecting means and the conflict map, for receiving the selection signal, determining from the selection signal and the conflict map whether a potential conflict could occur, and outputting a display message if a determination is made that a potential conflict could occur.

17. CANCELLED

18. The set-top system of claim 16, wherein said selecting means comprises a remote control, said set-top system further comprising:

an input device interface, for receiving signals from the remote control and converting the signals from the remote control into command signals.

19. The set-top system of claim 18, wherein said remote control comprises an infrared remote control and said input device interface further comprises:

converting means for converting infrared remote control signals to USB signals, said converting means receiving an infrared remote control signal, determining context of use of the infrared remote control signal, and generating a corresponding USB signal to communicate the infrared remote control signal to an intended device.

- 20. A computer readable computer program product expressed in a selected computer readable medium, comprising:
- a first computer code portion for selecting a first device application mode from a predetermined menu of device application modes, which menu includes at least two such predetermined device application modes;
- a second computer code portion for determining whether a second of said at least two such predetermined device application modes is active; and
- a third computer code mechanism for determining from a conflict map containing a list of device conflicts between the at least two predetermined device application modes whether a potential conflict could occur, and
- a third computer code portion for initiating television presentation of activities relating to said first device application mode if it is determined a potential device conflict may not occur.

Serial No. 09/499,442

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Greer et al.	Docket No.: 0908-CE RPB REF: CRUS-0164
Serial Number: 09/499,442	Art Unit: 2174
Filing Date: February 7, 2000	Examiner: Nhon D. Nguyen

Title: USER INTERFACE SYSTEMS, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR MULTI-FUNCTION CONSUMER ENTERTAINMENT APPLIANCES

REPLY BRIEF ON APPEAL (LARGE ENTITY)

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231 RECEIVED

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Technology Center 2100

Sir:

Transmitted herewith is a Brief on Appeal (3 copies) in the above-identified application.

- 1. An Oral Hearing is not requested.
- 2. THE APPEAL BRIEF FEE HAS ALREADY BEEN PAID with the Brief filed on December 11, 2003.
- 3. The Commissioner is hereby authorized to charge any additional fees associated with this communication, including patent application filing fees and processing fees under 37 C.F.R. § 1.16 and 1.17, or credit any overpayment to Deposit Account No. 50-1393.

Respectfully submitted,

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May 27, 2004